

- (b) a tungsten silicide film disposed along a surface of the recess;
- (c) a tungsten film overlaying said tungsten silicide film; and,
- (d) a tungsten plug deposited within the recess on said tungsten film.

12. (Amended) A semiconductor manufacturing system comprising:

- (a) a chamber within which sputter deposition is performed;
- (b) a tungsten silicide target mounted in the chamber;
- (c) a tungsten coil mounted in the chamber below the [Tungsten] tungsten silicide target;
- (d) a pedestal adapted to support the semiconductor source, positioned below the tungsten coil; and,
- (e) means, associated with the chamber, for generation of a plasma within the chamber above the surface of the semiconductor device.

Please add the following new claims:

17. (Added) A method for forming a tungsten plug on a semiconductor device having a dielectric material formed over a substrate and a recess formed in the dielectric material, and said tungsten plug to be formed within the recess, the method comprising the steps of:

- (a) conformally depositing tungsten silicide to a substantially uniform predetermined thickness along walls of the recess to form a first film;
- (b) conformally depositing tungsten to a substantially uniform predetermined thickness over the tungsten silicide within the recess and, after

said tungsten silicide reaches said predetermined thickness thereof to form a second film;

(c) depositing tungsten silicide within the recess while said tungsten is being deposited within the recess thereby forming a tungsten silicide gradient within said second film; and,

(d) depositing tungsten within the recess over the second film to form said tungsten plug.

18. (Added) The method of claim 17 wherein said tungsten silicide of the first film is deposited within the recess at a predetermined deposition rate, and said method comprises the step of reducing the rate of deposition of the tungsten silicide for the first film at about the same time as, or after starting the deposition of tungsten for the second film within the recess.

19. (Added) The method of claim 18 further comprising the steps of providing a chamber within which the deposition of the tungsten silicide and tungsten takes place; positioning the semiconductor device within the chamber; providing a tungsten silicide target and a tungsten coil within the chamber; and, generating a plasma within the chamber adjacent the semiconductor device for the sputter deposition of tungsten silicide from the target and the sputter deposition of tungsten from the coil.